ABSTRACT

A premises based wireless network includes a plurality of interconnected wireless access points. Each of the plurality of wireless access points provides wireless communications within a corresponding cell of a plurality of cells and is spaced to provide wireless coverage throughout the premises. The size of at least one cell of the plurality of cells is adjustable based upon cell communication characteristics. In order to adjust the size of a cell, the corresponding operating data rate is selectively adjusted. In particular, the size of the cell is increased by reducing the data rate or throughput capability. For example, at least one wireless access point may operate according to an industry standard protocol at a standard data rate with a relatively smaller cell size, and another may operate according to a proprietary protocol. A dual mode base station of the plurality of base stations may operate according to both the industry standard protocol and the proprietary protocol. At least one of the plurality of wireless access points may be selectively disabled, whereas another have its data rate to increase a corresponding cell size. In the network, a selectively disabled base station monitors communications within a previously active corresponding cell. Based upon the monitored communications, the selectively disabled base station becomes active to provide wireless communications within a corresponding cell.